

AMENDMENTS TO THE TITLE

Please amend the title of the invention as follows:

~~ACCESS DEVICE, ACCESS METHOD, ACCESS PROGRAM, AND CONTROL
DEVICE~~

ACCESS UNIT, ACCESS METHOD, COMPUTER-READABLE RECORDING
MEDIUM RECORDED WITH ACCESS PROGRAM, AND CONTROL UNIT

AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph at page 2, line 10:

Patent Document 1: Japanese Patent Laid-Open No. 7-182792 specification

Please delete the heading at page 2, line 12:

~~Disclosure of the Invention~~

Please add the following paragraph at page 3, after line 7:

Patent Document 1: Japanese Patent Laid-Open No. 7-182792 specification

Please add the following heading at page 3, before line 8:

Disclosure of the Invention

Please replace the paragraph at page 3, line 13, with the following rewritten paragraph:

An access unit according to the present invention which accesses a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising: a recording ~~means-section~~ for recording test data based on a predetermined test condition in the user area; a reading ~~means-section~~ for reading the test data recorded in the user area by the recording ~~means-section~~; and an adjusting ~~means-section~~ for referring to the test data read by the reading ~~means-section~~, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 4, line 15, with the following rewritten paragraph:

A computer-readable recording medium recorded with an ~~An~~-access program according to the present invention for accessing a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, allowing, an access unit which includes a recording ~~means~~

section for recording data in a record medium and a reading ~~means-section~~ for reading data from a record medium, to function as: a record instructing ~~means-section~~ for instructing the recording ~~means-section~~ to record test data based on a predetermined test condition in the user area; a read instructing ~~means-section~~ for instructing the reading ~~means-section~~ to read the test data recorded in the user area by the recording-~~means section~~; and an adjusting ~~means-section~~ for referring to the test data read by the reading ~~means section~~, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 5, line 3, with the following rewritten paragraph:

A control unit according to the present invention which controls an access unit, the access unit including a recording ~~means-section~~ for recording data in a record medium and a reading ~~means-section~~ for reading data from a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising: a record instructing ~~means-section~~ for instructing the recording ~~means-section~~ to record test data based on a predetermined test condition in the user area; a read instructing ~~means-section~~ for instructing the reading ~~means-section~~ to read the test data recorded in the user area by the recording-~~means section~~; and an adjusting ~~means-section~~ for referring to the test data read by the reading ~~means section~~, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 5, line 17, with the following rewritten paragraph:

According to these configurations, the record medium includes a user area for recording user data which can be recorded and regenerated based on an instruction given by a user. Then, the recording ~~means-section~~ is instructed to record test data based on a predetermined test condition in the user area, and the reading ~~means-section~~ is instructed to read the test data recorded in the user area by the recording-~~means section~~. Sequentially, the read test data read by the reading ~~means-section~~ is referred to, and thereby, an access parameter for accessing the record medium is adjusted.

Please replace the paragraph at page 16, line 25, with the following rewritten paragraph:

So far, an example of the access unit according to the embodiment of the present invention has been described by referring to Fig. 1 and Fig. 2. For example, in the example shown in Fig. 2, the system control circuit 102 and the recording-system circuit section 120 correspond to the recording-means section; the system control circuit 102 and the regeneration-system circuit section 130, to the reading-means section; and the system control circuit 102, to the adjusting-means section. However, the access unit 100 according to the present invention is not limited to the example shown in Fig. 2. Any configuration can be applied, as long as a plurality of component elements provided in an access unit include the above described functions.

Please replace the paragraph at page 18, line 6, with the following rewritten paragraph:

Furthermore, the access unit 100 may also include a communicating-means section. Such a communicating means-section is connected to a host PC (or personal computer). Via the communicating-means section, the access unit 100 may also transmit and receive data to and from the host PC, or receive a command from it. Such a command is, for example, a write command.

Please replace the paragraph at page 41, line 7, with the following rewritten paragraph:

The access unit according to the present invention which accesses a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising: a recording-means-section for recording test data based on a predetermined test condition in the user area; a reading-means-section for reading the test data recorded in the user area by the recording-means section; and an adjusting-means-section for referring to the test data read by the reading-means section, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 42, line 5, with the following rewritten paragraph:

Furthermore, in the above described access unit, a detecting ~~means~~section may be further provided for detecting a trigger for starting an adjustment of the access parameter. If this detecting ~~means~~section detects a trigger, the recording ~~means~~section records test data based on a predetermined test condition in the user area. In this case, an adjustment of the access parameter can be started by detecting a predetermined trigger.

Please replace the paragraph at page 42, line 12, with the following rewritten paragraph:

Moreover, in the above described access unit, the detecting ~~means~~section may also detect the trigger based on a change in the temperature of the access unit. In this case, an adjustment of the access parameter can be started, using the access unit's temperature change as a trigger.

Please replace the paragraph at page 42, line 17, with the following rewritten paragraph:

In addition, in the above described access unit, a user-data recording ~~means~~section may be further provided for recording user data in the user area. On the basis of the position of user data recorded by this user-data recording ~~means~~section, the detecting ~~means~~section detects the trigger. In this case, an adjustment of the access parameter can be started, using the user-data record position as a trigger.

Please replace the paragraph at page 42, line 24, with the following rewritten paragraph:

Furthermore, in the above described access unit, the detecting ~~means~~section may also detect the trigger if a write command issued by an external unit is inputted. In this case, an adjustment of the access parameter can be started, using the write command issued by an external unit as a trigger.

Please replace the paragraph at page 43, line 3, with the following rewritten paragraph:

Moreover, in the above described access unit, a user-data recording ~~means~~section may be further provided for executing an operation for recording user data in the user area. On the basis of the operation time of this user-data recording~~means~~section, the detecting ~~means~~section detects the trigger. In this case, an adjustment of the access parameter can be started, using the operation time to record user data as a trigger.

Please replace the paragraph at page 43, line 10, with the following rewritten paragraph:

In addition, in the above described access unit, it is preferable that a registering ~~means~~section be further provided for registering a test-record area in which the test data is recorded within the user area. According to this configuration, a test-record area in which the test data is recorded within the user area is registered, thus helping manage the test-record area.

Please replace the paragraph at page 43, line 17, with the following rewritten paragraph:

Furthermore, in the above described access unit, preferably, the registering ~~means~~section should register the test-record area as a defective area. According to this configuration, the test-record area is registered as a defective area. Thereby, user data can be continuously regenerated without executing a regeneration in the test-record area where the test data is recorded.

Please replace the paragraph at page 43, line 24, with the following rewritten paragraph:

Moreover, in the above described access unit, it is preferable that the recording ~~means~~section record the test data in a position which is a predetermined distance apart in

the radius directions of the record medium from a position in which user data is recorded within the user area.

Please replace the paragraph at page 44, line 11, with the following rewritten paragraph:

In addition, in the above described access unit, preferably, the recording ~~means~~ section should begin recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area, and should begin recording user data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which the test data finishes being recorded.

Please replace the paragraph at page 45, line 8, with the following rewritten paragraph:

Furthermore, in the above described access unit, it is preferable that a registering ~~means-section~~ be further provided for registering, as a defective area, a test-record area in which the test data is recorded within the user area, an area from a position in which user data finishes being recorded to a position in which the test data begins being recorded, and an area from a position in which the test data finishes being recorded to a position in which user data begins being recorded.

Please replace the paragraph at page 46, line 5, with the following rewritten paragraph:

Moreover, in the above described access unit, preferably, the recording ~~means~~ section should: begin recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area; execute a return from a position in which the test data finishes being recorded to the position in which the user data finishes being recorded; record user data up to the position in which the test data begins being recorded; execute a movement from the position in which the test data begins being

recorded to the position in which the test data finishes being recorded; and begin recording user data from the position in which the test data finishes being recorded.

Please replace the paragraph at page 47, line 8, with the following rewritten paragraph:

In addition, in the above described access unit, it is preferable that the recording ~~means~~ section: begin recording the test data from a position which is a predetermined distance apart in the radius directions of the record medium from a position in which user data finishes being recorded within the user area; execute a return from a position in which the test data finishes being recorded to the position in which the user data finishes being recorded; and begin recording user data from the position in which the user data finishes being recorded.

Please replace the paragraph at page 48, line 4, with the following rewritten paragraph:

Furthermore, in the above described access unit, preferably, the reading ~~means~~ section should read user data which is already recorded in the user area; a record-state detecting ~~means~~ section should be further provided for detecting a record state of the user data read by the reading-~~means~~ section; and the recording ~~means~~ section should record the test data in the user area, based on a record state which is detected by the record-state detecting-~~means~~ section.

Please replace the paragraph at page 48, line 20, with the following rewritten paragraph:

Moreover, in the above described access unit, it is preferable that the record-state detecting ~~means~~ section detect at least one of a jitter value, an asymmetry value, an error rate and an M-index of the user data read by the reading-~~means~~ section.

Please replace the paragraph at page 49, line 8, with the following rewritten paragraph:

In addition, in the above described access unit, preferably, the recording ~~means~~ section should record the test data in a track adjacent to the user data. According to this configuration, the test data is recorded in a track adjacent to the user data. Therefore, the user area can be used less wastefully than the case where the test data is recorded in a position a predetermined distance apart from the user-data record position.

Please replace the paragraph at page 50, line 14, with the following rewritten paragraph:

~~The computer-readable recording medium recorded with the~~The access program according to the present invention for accessing a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, allowing, an access unit which includes a recording ~~means~~ section for recording data in a record medium and a reading ~~means~~ section for reading data from a record medium, to function as: a record instructing ~~means~~ section for instructing the recording ~~means~~ section to record test data based on a predetermined test condition in the user area; a read instructing ~~means~~ section for instructing the reading ~~means~~ section to read the test data recorded in the user area by the recording ~~means~~ section; and an adjusting ~~means~~ section for referring to the test data read by the reading ~~means~~ section, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 51, line 2, with the following rewritten paragraph:

According to this configuration, the record medium includes a user area for recording user data which can be recorded and regenerated based on an instruction given by a user. Then, the recording ~~means~~ section is instructed to record test data based on a predetermined test condition in the user area, and the reading ~~means~~ section is instructed to read the test data recorded in the user area by the recording ~~means~~ section. Sequentially, by referring to the test data read by the reading ~~means~~ section, an access parameter for accessing the record medium is adjusted.

Please replace the paragraph at page 51, line 18, with the following rewritten paragraph:

The control unit according to the present invention which controls an access unit, the access unit including a recording ~~means-section~~ for recording data in a record medium and a reading ~~means-section~~ for reading data from a record medium, the record medium including a user area for recording user data which is recorded and regenerated based on an instruction given by a user, comprising: a record instructing ~~means-section~~ for instructing the recording ~~means-section~~ to record test data based on a predetermined test condition in the user area; a read instructing ~~means-section~~ for instructing the reading ~~means-section~~ to read the test data recorded in the user area by the recording-~~means section~~; and an adjusting ~~means-section~~ for referring to the test data read by the reading ~~means section~~, and adjusting an access parameter for accessing the record medium.

Please replace the paragraph at page 52, line 6, with the following rewritten paragraph:

According to this configuration, the record medium includes a user area for recording user data which can be recorded and regenerated based on an instruction given by a user. Then, the recording ~~means-section~~ is instructed to record test data based on a predetermined test condition in the user area, and the reading ~~means-section~~ is instructed to read the test data recorded in the user area by the recording-~~means section~~. Sequentially, by referring to the test data read by the reading-~~means section~~, an access parameter for accessing the record medium is adjusted.